

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

Claims 1–19 (Cancelled).

1 Claim 20 (Currently Amended). A bus power-supply device in a node for
2 connection to a serial bus, said bus power-supply device structured to
3 supply power from a power-supply voltage of a node of a proceeding stage
4 to a node of a next stage through a the serial bus connected to said node by
5 a physical layer and a plurality of connectors conductive to each other of
6 the node, wherein
7 when a power-supply voltage of said node of the proceeding stage
8 is not supplied, a DC voltage is supplied from said node of the proceeding
9 stage through said serial bus to said physical layer, and when said power-
10 supply voltage is supplied, a DC voltage is ~~supplies~~ supplied from said
11 power-supply voltage to said physical layer by cutting off a path for
12 supplying a DC voltage through said serial bus to said physical layer,
13 communication being maintained between said node and proceeding and
14 next stages through the serial bus whether a power-supply voltage is
15 supplied or not.

1 Claim 21 (Currently Amended). The bus power-supply as set forth in claim
2 20, comprising:
3 a voltage detection unit which detects said power-supply voltage
4 being supplied or not being supplied; and
5 a selector which supplies a DC voltage coming through said serial
6 bus to said physical layer when said voltage detection unit is yet to detect
7 supply of a power-supply voltage and supplies a DC voltage from the
8 power-supply voltage to said physical layer by cutting off said path for
9 supplying a DC voltage through said serial bus to said physical layer when

10 said voltage detection unit detects supply.

1 Claim 22 (Previously Presented). The bus power-supply as set forth in
2 claim 20, wherein said serial bus is an IEEE-1394-1995 Standard serial
3 bus.

1 Claim 23 (Previously Presented). The bus power-supply device as set forth
2 in claim 21, comprising:

3 a first path for supplying power from said power-supply voltage to
4 said physical⁶ layer; and

5 a second path for supplying power coming through said serial bus
6 to said physical layer, wherein

7 when power is supplied from said power-supply voltage, said
8 selector cuts off said second path.

1 Claim 24 (Previously Presented). The bus power-supply device as set forth
2 in claim 21, wherein said selector is a semiconductor switch.

1 Claim 25 (Previously Presented). The bus power-supply device as set forth
2 in claim 21⁶, wherein said voltage detection unit is a comparator.

1 Claim 26 (Currently Amended). The bus power-supply device as set forth
2 in claim 21, wherein a relay element functions as said voltage detection
3 unit and said selector.

1 Claim 27 (Previously Presented). The bus power-supply device as set forth
2 in claim 20, comprising:

3 a power-supply circuit which converts said power-supply voltage
4 into a DC voltage for said serial bus and outputs said DC voltage;

5 a converter which converts a DC voltage output from said power-
6 supply circuit into a DC voltage for said physical layer;

7 a voltage detection unit which detects said power-supply voltage
8 being supplied or not being supplied to said power-supply circuit; and
9 a selector which supplies a DC voltage applied through said serial
10 bus to said converter when said power-supply voltage is not supplied to
11 said power-supply circuit and cuts off a path for supplying a DC voltage
12 through said serial bus to said converter to supply an output of said power-
13 supply circuit to said converter when said power-supply voltage is
14 supplied.

1 Claim 28 (Currently Amended). The bus power-supply device as set forth
2 in claim 27, comprising:

3 a first path for supplying power from said power-supply voltage to
4 said physical layer; and

5 a second path for supplying power coming through said serial bus
6 to said physical layer, wherein

7 when power is supplied from said power-supply voltage, said
8 selector cuts off said second path.

1 Claim 29 (Previously Presented). The bus power-supply device as set forth
2 in claim 27, wherein said voltage detection unit detects said power-supply
3 voltage being supplied or not being supplied by detecting an output voltage
4 of said power-supply circuit.

1 Claim 30 (Currently Amended). The bus power-supply device as set forth
2 in claim 27, wherein said voltage detection unit detects said power-supply
3 voltage being supplied or not being supplied by detecting an output voltage
4 of said power-supply circuit, and which further comprises:

5 a first path for supplying power from said power-supply voltage to
6 said physical layer; and

7 a second path for supplying power coming through said serial bus
8 to said physical layer, wherein

9 when power is supplied from said power-supply voltage, said
10 selector cuts off said second path.

1 Claim 31 (Previously Presented). The bus power-supply device as set forth
2 in claim 27, comprising:

3 a first path for supplying power from said power-supply voltage to
4 said physical layer; and

5 a second path for supplying power coming through said serial bus
6 to said physical layer, wherein

7 when power is supplied from said power-supply voltage, said
8 selector cuts off said second path, and

9 wherein said selector is a semiconductor switch.

1 Claim 32 (Previously Presented). The bus power-supply device as set forth
2 in claim 27, wherein said voltage detection unit detects said power-supply
3 voltage being supplied or not being supplied by detecting an output voltage
4 of said power-supply circuit, and wherein said selector is a semiconductor
5 switch.

1 Claim 33 (Previously Presented). The bus power-supply device as set forth
2 in claim 27, wherein said voltage detection unit is a comparator.

1 Claim 34 (Previously Presented). The bus power-supply device as set forth
2 in claim 27 wherein a relay element functions as said voltage detection unit
3 and said selector.

1 Claim 35 (Currently Amended). A node having a bus power-supply device
2 structured to supply power from a power-supply voltage to a node of a next
3 stage through a serial bus connected to said node by a physical layer and a
4 plurality of connectors conductive to each other of the node, comprising:
5 a plurality of connectors each having a power-supply terminal to

6 which a DC voltage is applied from other nodes through said serial bus and
7 a signal terminal to and from which a signal from other nodes in input and
8 output;

9 a physical layer which outputs a signal input through a signal
10 terminal of one connector to a signal terminal of the other connector,
11 wherein

12 power-supply terminals of said plurality of connectors are rendered
13 conductive to each other,

14 said bus power-supply device supplies a DC voltage through said
15 serial bus to said physical layer through said power-supply terminal when
16 none of a power-supply voltage of said node is supplied, and

17 supplies a DC voltage from the power-supply voltage to said
18 physical layer by cutting off a path for supplying a DC voltage through
19 said serial bus to said physical layer when said power-supply voltage is
20 supplied, communication being maintained between said node and
21 proceeding and next stages through the serial bus whether a power-supply
22 voltage is supplied or not.

1 Claim 36 (Currently Amended). The node as set forth in claim 35, wherein
2 said bus power-supply device comprises

3 a voltage detection unit which detects said power-supply voltage
4 being supplied or not being supplied; and

5 a selector which supplies a DC voltage coming through said serial
6 bus to said physical layer when said voltage detection unit is yet to detect
7 supply of a power-supply voltage and supplies a DC voltage from the
8 power-supply voltage to said physical layer by cutting off said path for
9 supplying a DC voltage through said serial bus to said physical layer when
10 said voltage detection unit detects supply.

1 Claim 37 (Currently Amended). The node as set forth in claim 36,
2 comprising:

3 a first path for supplying power from said power-supply voltage to
4 said physical layer; and
5 a second path for supplying power coming through said serial bus
6 to said physical layer, wherein when power is supplied from said power-
7 supply voltage, said selector cuts off said second path.

1 Claim 38 (Currently Amended). The node as set forth in claim 35, wherein
2 said bus power-supply device comprises:
3 a power-supply circuit which converts said power-supply voltage
4 into a DC voltage for said serial bus and outputs said DC voltage;
5 a converter which converts a DC voltage output from said power-
6 supply circuit into a DC voltage for said physical layer;
7 a voltage detection unit which detects said power-supply voltage
8 being supplied or not being supplied to said power-supply circuit; and
9 a selector which supplies a DC voltage applied through said serial
10 bus to said converter when said power-supply voltage is not supplied to
11 said power-supply circuit and cuts off a path for supplying a DC voltage
12 through said serial bus to said converter to supply an output of said power-
13 supply circuit to said converter when said power-supply voltage is
14 supplied.